

Beta Chem Laboratory
Site

OSC - Doug Ferguson

SSID 8783

7530-00-286-6207
FEDERAL SUPPLY SERVICE
100-100

Beta Chem Site

14410 W. 100th Street
Lenexa, KS 66215

On-Scene Coordinator

Doug Ferguson
USEPA Region 7
913-551-7221

Beta Chem lab produced radioactively labeled substances for research. Organic molecules were synthesized with carbon-14 as tracers in the organic compound of interest. EPA first became aware of the site in 2005 when KDHE requested EPA assistance in evaluating chemical and radiological hazards at the site. The brief EPA facility (at the time) found that many containers appeared to be disarray and radiation contamination was elevated throughout the site but, they were not regulated due to the small quantities of chemicals involved (most were under 1gallon).

In October 2013, KDHE seized the Beta Chem lab facility due to non-compliance with Beta Chem's radiation license. A time-critical removal action was approved to address a threat of release to the environment because of fire or explosion. Many flammable and reactive materials are stored at the lab including compressed gasses and it is uncertain if they will remain stable in the future.

Site History

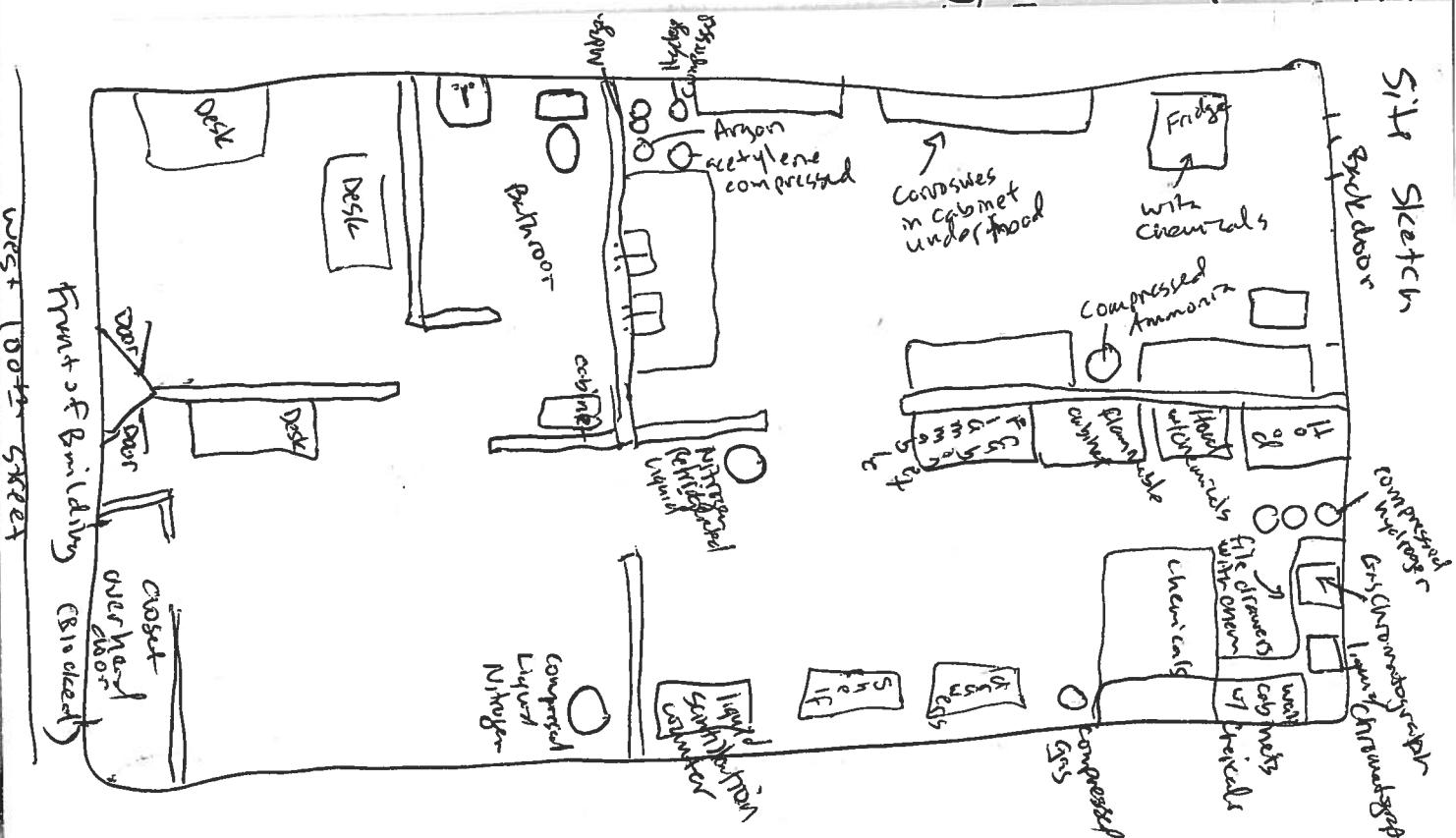
DKT 5-5-2014

Site Sketch

compressing
bi-chloromethane
liquefied chloroethane

Beta Chem Site

5/5/2014



0745 Meet Tom Mahler, Mike Davis at EPA warehouse to pack for site work at Beta Chem Labs in Lenexa KS. Weather forecast has a high of 83°F with SE winds 5-10 mph.

0754 Start Team Members (STM) Danny O'Connor, Bryant Menefee, and Nick Wiedenholt are also preparing equipment at TLC to bring to the

site.

0754 Arrive at site and begin setting up equipment and supplies. For Air Monitoring at the site crew are using a RAE products Multi-RAE Pro for volatile organic compounds (VOC's), percent oxygen (%O₂), lower explosive limit (LEL), gamma radiation, carbon monoxide and Hydrogen Sulfide. The ID number on the unit is #1774. For alpha, beta and gamma detection Ludlum Model 2741 equipped with a Model 44-9 Pancake probe with 1D #269 R7 and #36. Air monitoring/ Sampling for radiation with Radco air samplers #433 and H634. The swipe samples will be counted on the

Continued next

QES 5/5/2014

Beta Chem Lab Site

5/5/2014

(Continued from previous)

Ludlum 3030 dosimeter counters #642 and 643. Background on ludlum 2241 probe is 360cpm.

1000 Meet with KDTE Representative Tom Conley who has the key to the facility.

1030 Safety meeting with EPA and START

Major hazards are flammable, toxic and reactive chemicals, which we will be taking and inventory of. Also, EPA will be assessing

The carbon-14 radiation contamination.

Previous PID concentrations were not

about background and radiation only

an issue at the surface of the materials

at the lab. Air samples collected on the

NaI detector did not show radiation

concentrations above a level of concern

for human health. We will wear Level

PPE (safety glasses, tyvek, nitrile gloves and tyvek booties). Site condition will

be monitored with Ludlum model 2241

and 4030 with PPLD PID detector.

1049 Tom Conley of KDTE leads site

walk with EPA and START. No detectable

rad contamination until surfaces are

covered with about 1 inch. Count

Refuge Chem Lab Site

5/5/2014

(Continued from previous)

No concentrations above background measured on the PID and OR/LO

were 20.9% and 0% respectively.

1115 Mike Davis begins video documentation of the facility.

1120 Crews begin inventory of chemical

and air and radiation monitoring.

1135 Receive purge to site from Tom

Conley of KDTE.

1207 EPA OSC's Mahler and Davis (Mike)

Screen chemical hood for radiation

contamination using wipers and hand-held

monitors.

1225 Mahler and Davis determined the

hoods were around 5000 cpm with the

Ludlum 2241 equipped with the 44-5

pancake probe. The same equipment

Showed about 1300 cpm off the

hydrogen and argon compressed gas

cylinders located in the lab.

1255 START contractor and EPA

personnel continue to inventory

chemicals at the site, as well as, collect

wipe samples of surfaces for radiation

Beta Chem Lab Site

5/5/2014

Beta Chem Lab Site

5/6/2014

(Continued from previous)
1400 Mike Davis (EPA OSC) off-site for
the day.
1421 Check air monitors, 4Sas and
P&D do not show elevated concentrations
of solvents, or flammables. Oxygen O₂
normal.

1425 Start cleaning out office area
to set up for sampling activities. Materials
removed from office area placed into boxes
and moved into room to the east for storage.
1609 Finish screening and cleaning out
office area for work with the cellulose
3030 drawer counter and other
sampling activities. Plastic sheets placed
over desks, chairs, and floor to reduce
impacts of sampling activities as well as
prevent any transfer of contamination.

1635 Shut off packed air pump for
the day and place filter sample in
ziplock with date, run time and
air volume sample written on bag.
Leave Depart Beta Chem Site for the day.

0700 Meet at EPA warehouse to load
and transport equipment to the site.
Weather forecast for today: mix of
clouds and sun with a high of 86°F,
winds SSE at 10-20 mph and 0%
chance of precipitation. Crews today
~~will continue to inventory~~
chemicals and evaluate radiation contamination.

0945 Call ERRS RM Roski to discuss site
conditions and agree to send him pictures
of the site and an inventory of the chemicals
identified on site so far.

1120 Arrive on-site. Start RM O'Connor,
and STARR crews Wiederholt and
minimum setup air monitoring for
VOCs, radiation, O₂, LEL, CO and H₂S.
No chemical containers are being
opened, just inventoried, and air
monitoring indicated no respiratory
hazards are present detected so
work will proceed in Level D PPE.

1305 Crews notice that the refridgerator
(with numerous chemicals in it) is running

DATA

Beta Chem Lab Site

5-6-2014

(Continued from previous)

1335 Purchase two small fridges and begin transfer chemicals from non-working fridges to the new ones. Also, several chemicals were observed with labels stating that they should be refrigerated but were not refrigerated. These chemical containers were also placed in the refrigerators purchased by START for the site.

1731 Crews off-site for the day.

Off

5-6-2014

Beta Chem Lab Site

5-7-2014

0803 Arrive on-site. START setting up air monitors and equipment for inventoring chemicals and assessing radiation contamination. START PM

O'Connor on-site with crew of Wedderholt and Memmert. EPA personnel on-site to help with site activities are Hooper, Wenzler today has a high of 88°F and low of 60°F. 0% chance of precipitation with wind's out of the South at 20-30 mph.

0835 Safety briefing with crews. Discuss site hazards, air monitoring, PPE, heat stress, slips, trips and fall prevention. 0931 Set up ladder at back exterior of the facility and take a wipe sample of the vent stack to determine if removable radioactive contamination is present.

1130 Chuck Hooper of EPA begins sampling chemicals and their containers for radioactive contamination.

Hooper will use medium 2241 equipped with a 44-9 probe to screen containers and their contents. The probe is only 2-3% efficient at measuring the beta

Beta Chem Lab Site

5-7-2014

(continued from previous)
1635 (continued) Counts Per minute (CPM) to disintegration per minute (dpm) per 100 square centimeters (100 cm^2).
1612 Chuck Hooper indicates that most chemical containers went elevated radiation counts, especially on the labels.
About 20 samples of chemicals from the containers are collected for liquid scintillation counting (LSC) as it is about 80-90% efficient at detecting beta radiation from carbon-14.

1707 All personnel off-site for the day - after securing the site.

DR
5-7-2014

Beta Chem Lab Site

5-8-2014

0836 Arrive on-site. EPA personnel on site are Tom Mahler and Chuck Hooper. START pm O'Connor and crew at Wiedenholt and Memmen also on site. Weather today is a high of 76°F , 30% chance of thunderstorms, winds south at 20-30 mph.

Crew will continue to inventory and segregate chemicals into hazard groups. Hooper will continue to test chemicals and containers as well as lab surfaces for radiation contamination.

0911 Safety briefing with crews. Site several containers requiring refrigeration found on workers and in cabinets. Crews instructed to place them in refrigerators purchased for the site. Also,

numerous containers of flammable liquids in cabinets not designed for flammable liquids are moved to flammable liquids cabinets as space allows off-site for the day.

DR
5-8-2014

Beth Chem Lab Site

5-9-2014

Beta Chem Lab Site
(continued from previous)

5-9-2014

Other Arrive on-site. Weather forecast is 74/54°F, 10% chance precipitation, wind is WNW at 5-10 mph. STAFF personnel on site include RM O'Connor, Permian and Wiedeholt. Work plan for the day includes screening chemicals for radiation, sample unknowns, hazard categorization of unknown soil sample for radiation behind building back door of site, collect wise samples from surfaces inside and outside of the facility, air monitoring (VOCs, O₂, IEL, CO, H₂S and radiation contamination), inventory chemicals and segregate chemicals into hazard grounds.

1503 Soil behind the Beth Chem facility was screened with a Ludlum 2241 equipped with a 44.9 "Pancake" probe. Soil samples were collected from areas measured to be site chemical and radiation hazards as well as 10 additional samples/soil fall hazard and heat stress from presence.

1503 Soil behind the Beth Chem facility was screened with a Ludlum 2241 equipped with a 44.9 "Pancake" probe. Soil samples were collected from areas measured to be site chemical and radiation hazards as well as 10 additional samples/soil fall hazard and heat stress from presence. The samples were sent to Test America Laboratory of LSC, 1642 OSC Mahler Surveyed containers throughout the lab with the Ludlum 2241 with a 44.9 pancake probe. Most containers were measured to have radiation contamination significantly above background. 1652 DSC Ferguson found an about 8 once

1003 Tom Connelly with KODTE radiation program on-site to assist with radiation sister characterization. 1107 Chuck Hooper off-site. 1126 Call ERSS RM Roski to discuss

Beta Chem Lab Site 5-9-2014

(continued from previous) 1652 (continued) located near the analytical instruments on the east wall.

The contents were a darkly colored liquid with about 200,000 cpm with the medium 2241 with 44-9 probe.

1733 All flammables in flammable container of refrigerator (if label states it should be refrigerated). Segregation of other containers is on going. About 900 containers identified so far.

1737 off-site for the day

Beta Chem Lab Site 5-12-2014

0653 Receive call from ERSS RM Roski. He injured his hip and will not be able to make it to the site until later.

Roski will continue to contact disposal companies that will handle both hazardous waste and radioactive waste.

0727 Weather forecast 77°F high, 49°F low, 68% chance of rain, wind 12 mph WSW.

0759 Arrive on-site. START PM O'Connor and STARR member Brown on-site. Crews continuing to work on inventory, identify hazard groups and segregating chemicals. 0930 EPA: HP Hooper on-site to assist with radioactive contamination assessment.

1430 Spoke with Dave Culp of Chase Environmental (Rad walk Broker found on CRC PD website Hooper referred me too. Dave Culp visited the site to conduct on-site cleanup prior to EPA's removal action.) Culp stated chemicals

on-site unlikely to be reused due to age and radiation contamination. Culp also stated ICP and Scintillation counting (LSC) was the preferred method for quantification.

QA

5-9-2014

Beta Chem Lab Site 5/13/2014

Beta Chem Lab Site 5/13/2014
(continued from previous)

0753 Arrive on-site. Weather for the day is forecast for cloudy with some sun shine, high 65°F, wind NNW at 15-25 mph. Crew's today will continue field screening as well as collect composite sample from flammable liquids and other wash streams.

0801 Start Team Member (STM) Keith Brown on-site to field screen chemicals with mixing or hand written labels. Brown will also document structures.

0805 OSC NM. Davis on-site to assist with field screening unknowns.
1000 OSC Tulsa Fire on-site to assist with field screening of unknowns.
1045 EPA Health Physicist Chuck Hooper arrives on-site to test the liquid sunillation counter. Hooper could not get the unit to operate.

The containers appear empty but have very high counts of radiation as measured with the Ludlum 2241 gamma probe.
1633 off-site for the day.

5/13/2014

RDT

1237 Judge Welden of KDOT arrives on site for a visit. OSC Ferguson showed her the lab and explained to her characterization and clean up process taking place at the site.
1603 EPA Hooper identifies several

out of list

5/14/2014

5/14/2014

Beth Chem lab Site 5/14/2014

0803 Arrive on site. Weather: with

64°F, low 43°F, 10% chance of precip,

cloudy, NNE wind at 10-15 mph.

0807 On-site today for START. 3

Danny O'Connor and Keith Brown. Mike

Davis, John Frey and Doug Ferguson here

for EPA. Crews will continue inventory

chemicals and identify unknowns by

field screening.

1031 Generator for office arrives. Per

phone call to ERS David Brinkmeier,

It is okay for me to sign for receipt of

the generator.

1210 Mobile mini office arrives.

1440 Electrician arrives the Generator

arrives to the office.

1330 Talk with ERS's Jim Roski about

Mixed waste brokers on CRCPD

web-site as possible resources for

disposal of contaminated materials

from the site.

1612 START Jim O'Connor will try to

finish the majority of chemicals on

the inventory and identify their hazards.

1704 Secure office and site. Off-site

0701 Arrive at EPA Region 1 office to
0803 Arrive on site. Weather today 13
60°F high, 37°F low, 10% chance of precip,
wind NW 15-25 mph.
0805 Safety brief. No RPE on site of
Beth Chem facility, APR or PAPR for
Field screening of unknowns. Sampling of
unknowns in level B RPE,
0811 EPA personnel on site include: Davis,
Frey and Ferguson. Danny O'Connor and
Keith Brown are here for START. Brown,
Davis and Frey will field screen unknowns
for segregation into hazard groups.
O'Connor will take composite samples
and screen them for radiation. Air
monitoring with U gas and PID as well
as Radon and medium 44-9 probe on
2241 meter for radiation.

1027 Called ERS Jim Roski. Ask Roski
to get disposal price quotations for
both rad contaminated and non-rad
contaminated.

1237 O'Connor's initial screening of
composite samples for rad contamination
is 11-11. 721 and 44-9 power indicate

Beta Chem Lab Site

(continued from previous)

ether/tetrahydrofuran composite and unknowns. STACI will document site the single bonded hydrocarbon flammables. activities and OSC mile Davis will The aromatics waste stream did not have radiation counts significantly above background

1735 Secure sifted debris for the day.

5/15/2014

Beta Chem Lab Site

5/16/2014

OSCO crews continue field screening unknowns. STACI will document site supervisor site activities for EPA OSC Ferguson is off-site for the day due to personal obligations.

Off-Site
OSCO
5-15-2014

Off
5-16-2014

Beta Chem Lab Site

5-19-2014

0817 Arrive on-site. Weather high 84°F,
low 65°F, 20% chance of precip, wind 22 mph
out of the south. Starts with Brown

on-site today. Brown will continue
field screening unknowns today.

1014 Call ERKs Ron Roski. waste broker
requesting copy of Beta Chem's hazwop
will scan and send ASAP.

1059 EPA HP Hooper on-site to gather

data on rad contamination

1258 Brown estimates about 100 containers
left field screen. Many appear to be

liquid scintillation vials

1323 Spoke with Tom Miller of Lenexa
Fire. He would like to visit the site around

1500 today.

1438 Spoke on phone with Todd Lawrence of
the Kansas Civil Support Team. Lawrence
and his civil support team can
come to the site on May 22, 2014 at 0900
to screen the lab for chemical hazards
with a mobile gas chromatograph/mass

spectrometer.

1505 Tom Miller and 2 other Lenexa
fire department representatives with the

Beta Chem Lab Site
(Continued from previous)

5-19-2014

1707 Keith Brown off-site for the day.
1715 OSF Ferguson off-site for the day.

Beth Chem Lab Site

5-20-14

- 0721 Arrive on-site weather for today is 88°F high, 70°F low, no precip, sunny, wind 15 mph SSW, work today: finish field screening (and screening of composites sampling) by hazard group. Segregate containers into hazard groups by compatibility. Beth Brown on-site for STAC. Chase Hooper of EPA on-site with OSC John Frey bring PPE and other supplies from the EPA warehouse.
- 1007 OSC Frey on-site with supplies. Frey will work with Brown + field screen unknowns.
- 1531 OSC Frey off-site for the day. Captain Elizabeth Tipton of the Kansas National Guard CST will show her tomorrow to pre-plan for their lab assistance of May 22.
- 1617 EPA Hooper off-site for the day.
- 1721 Depart site for the day.

Beth Chem Lab Site

5-21-2014

- 0755 Arrive on-site. Weather is forecasted high 89°F, partly cloudy, 10% chance of rain, wind ESE at 5-10 mph. Work today: find containers with unclear labeling, inventory chemicals, field screen chemicals and review inventory for accuracy.
- 0836 Call EPA Plan Roshi. Send him updated inventory of chemicals for disposal estimates.
- 1003 EPA Hooper on-site to take radiation counts of surfaces in the lab.
- 1031 Elizabeth Tipton and Jacob Burkes of the KS CST arrive on-site to prepare for mobile lab visit.
- 1105 John Frey off-site for the day.
- 1642 START's Bryant McInerney and Cosmo Cianciari off-site for the day.
- 1709 EPA Hooper and Ferguson off-site for the day.

OK

5-20-2014

5-21-14

OK

Beth Chem Lab Site

5-22-14

- 0742 Arrive at site. Weather 73° 79°F
W^NE, 600F low, 40°. Chance rain, wind
ENE at 15 mph. Crews continue to update
chemical inventory, field screen chemicals,
secure disposal estimates, collect screening
data on rad contamination.
- 0801 START memorandum on site for day.
0816 (concur) of START on-site.
- 0830 KS CST arrives on site and set up
for chemical and rad screening - f the
facility.
- 1002 KS CST enters the lab with
portable GC/MS to screen for volatile
chemicals.
- 1203 KS CST reports no chemicals
were detected in air monitoring off the
BC/MS about the part per million range.
- 1407 OSC turns off-site
- 1452 Decide to bulk by hazard groups
where possible to save time and cost
of sending samples of each container
for liquid scintillation testing. Also,
bulking does not require container to be
uncontaminated.

Off

5-23-14

Beth Chem Lab Site

5-23-2014

- 0810 Arrive on-site. Weather 82°F high,
62°F low, 10% chance of rain, wind E at
10-15 mph. Crew updating chemical
inventory and field screening unknowns.
STARTS memorandum on site for day.
0915 EPA's Mike Davis, John Frey on-site
in the area and requests a visit to the
site.
- 0923 DuPont arrives on-site. DuPont
tours the lab and the cleanup process
overviews.
- 1209 (concur) updating inventory with
updates on empty containers and
field screening results.
- 1242 EPA Davis and Frey off-site
for the day.
- 1430 START off site for day.
- 1445 EPA Hooper off-site for day.
- 1645 OSC Ferguson off-site for day.

Beta Chem Lab Site

5-27-2014

(no work on 5-26-14, Memorial Day Holiday)
0751 Arrive on-site. Weather: 86°F high,

63°F low, 700s chance of rain, wind WSW
at 5-10 mph.

0801 START O'Connor on-site. START

updating inventory of chemicals for
 disposal estimates. Contact to segregate

chemical by hazard group.

0945 Call EPA's Roski about debt
for disposal estimates. Also, cost
estimates on debris and acceptance

criteria.

0959 EPA Hoyer on-site to screen
lab equipment for lead contamination.

1154 EPA OSE Mahler on-site.

1157 Crews off-site for the day.

Beta Chem Lab Site

5-28-14

0804 START's O'Connor on-site. START
Review inventory, assigning hazard and
group and segregating containers.

0944 Arrive on-site. Weather:
High 83°F, Low 63°F, 70% chance
of rain, wind NNE, 5-10 mph.
1703 Crews off-site for the day.

Def

5-27-14

Def

5-28-14

Beth Chen Lab Site

5-29-14

0759 START O'Connor on-site updating the chemical inventory
1034 Also, START is setting up lab services for liquid scintillation testing of chemicals and containers 0957 EPA Hooper on site for radiation contamination assessment activities.

1034 Arrive on-site. Weather forecast 85°F high, low 70°F chance for sun, wind E at 10-15 mph Continue Segregation of chemicals into hazard groups.

1256 Reasons: Radiation Screening activities with Hooper. Theadium 2211 with 44-9 prob on counts. 2-3 times for every 100 disinifications actually occurring. ICDAE's cleanup level is 6,000 disintegrations per minute per 100 cm². Our 44-9 probe is not 100 cm². The total activity must be below 60,000 dpm/100 cm². Hooper calculated this to be 180 cpm over background on the radium 226

Beth Chen Lab Site

5-30-14

0742 Arrive on-site. 0833 Called Logan Wampler of Lenexa, KS parks department at 913-477-7500 who granted permission for EPA to collect a reference sample of soil today at Electric Park in Lenexa.

0937 Discuss site cleanup progress with Tom Conley of ICDAE. 1134 Call ERPS/RM Rosci to have him start setting up lists of waste groupings for us to segregate. 1209 Collect reference soil sample at Electric Park located near the intersection of 87th Street and Loriet Blvd in Lenexa, KS. 1307 Hooper and Mahler of EPA begin screening and inventory of radiation source containers. 1615 Crews off-site for the week.

Debt 5-30-14

Beth Charland Site 6/2-6/2014

OSL Treasury out for this week.
EPA use Tom Mahler on-site
directing cleanup and assessment
activities. START project manager
Dunne O'Connor documented site
activities for the week of
June 2-6, 2014.

DOLY

6-7-2014

Beth Chem Lab Site 6-9-2014

Office Arrive on-site. Weather partly cloudy.
Wards east at 10-20 mph. 80% chance of rain with highs in low 70°F low around 60°F.
(new) will separate chemicals into categories
for handling, begin bulkings, called composite
samples for EOC, package bulked chemicals
for disposal, continue road assessment.

1032 START on-site today Keith Brown
and Bryan Mohr.

1123 Spoke by phone with EERS Ben Roski.
Rocki and 2 crews will arrive on-site
tomorrow.

1132 Air compressor arrives for crews to use
for supplied air in conjunction with
filters to bring air to Grade D.

1208 Spoke with Aaron Hulett of
Praxair at 816-221-3030. Praxair
will not take back the cylinders from
the site. Additionally, Dale Hawkins said
Praxair would not refill them or take
them back to bad contamination.

1249 Called Air Products at 800-654-4567.
Beth Smith said Air Products was sold to
Air Gas in 2002. Spoke with Joel Moore of Airgas
at 913-671-7820 who said Air Gas will not

Beta Chem Lab Site SIT
(continued from previous)

6-9-2014

1435 took up current value of unused/unopened chemicals on Sigma-Aldrich web site. Value of new chemicals estimated to be a few hundred thousand dollars. Chemicals still in boxes likely don't have had contamination lost one box when opened had a discolored cap and it appeared to have only $\frac{1}{3}$ of contents remaining. Other unopened chemicals have had contamination on outside and would be challenging to decom - including removal at the lab. Disposing of chemicals of questionable age and potentially externally contaminated not likely and would add little to the total disposal cost of all the other previously opened chemicals.

1712 Crews off-site for the day.

lcr

6-9-2014

Beta Chem Lab Site SIT
6-10-14

0741 Arrived on site. ERPS run Rose, brief held for new workers on-site due to their unfamiliarity with the hazards.

STRETS O'Connor, Maher and Brown on-site. EPA Hooper on site for risk assessment activities.

0847 Digest work for started the day with crews. Flammable liquids will be tested for combustibility by take small samples of each and mixing in a bucket to observe any reactions. If no hazardous reactions occur the flammable liquids will be bulked and a sample taken for LSC and waste profiling. Containers will be bonded to the bulking drum and fire extinguishers on hand.

1035 Set up air line hose for 2 crews member bulking the flammable liquids and performing the combustibility study.

1107 About 5-6 chemicals reacted and were segregated out for other disposal procedures.

1303 Combustible flammable liquids in hand into closed cardboard drum. About

Beta Chem Lab Site 6-10-14
(continued from previous)

1725 START and ERRS off-site
1735 EPA off-site.

0801 Bryan Mohr from STARI on-site.
Mohr will make inventory of chemicals in
fridges purchased for site. Bloom and Smulte
will use airline respirator w/ PPE to evaluate
pressure in large cylinders on-site.
1230 START Cuddy McLarty on-site to
assist in updating list of chemicals bulkels
and update inventory list.

1652 Call to Dave Williams of EPA to discuss
stabilizing the site by venting hydrogen
and acetylene gas cylinders on-site as
the tanks are over due for hydrostatic
testing and the companies that supplied
the cylinders will not take them back or
refill them due to bad contamination on
the surface of the compressed gas
cylinders. Williams agrees the best solution
is to vent the gases on-site.
1725 START and ERRS off-site.
1742 off-site for the day

6-10-14
Dey

Beta Chem Lab Site 6-11-2014

0745 Arrive on site. Weather 83°F high,
63°F low, 0.0 precip, wind WSW at 5-10 mph.
ERS crew Rocki, Smulte and Bloom on site

6-11-14
Dey

Beth Chem lab site

6-12-2014

0735 Arrive on-site. ERRS work on-site.

0744 START McCloskey and Mohr on-site

low 60°F, 0% precip, wind N 5-10 mph.

0745 ERRS crew Bloom and Shultz on-site.

0832 Crews begin venting acetylene gas through a tube placed on a bracket of winter to prevent/reduce ignition potential. Fire extinguishers on-hand in case

of ignition. Crews monitor acetylene concentrations when LEL monitor and PID/FID meter. Crews will adjust gas flow rate to keep acetylene concentrations below the LEL (well below the LEL).

1207 ERA Hooper on-site to test equipment and lab surfaces for rad contamination.

1229 Acetylene cylinder #978 finished venting.

1328 ERRS crew begin venting acetylene cylinder #741

1732 START and ERRS off-site for the day. 1834 Off-site for the day.

Beth Chem lab Site

6-13-2014

0745 Arrive on site. Weather high 78°F

low 61°F, 0% precip, wind N 5-10 mph.

Mohr and Ciancaro on-site for START.

Ruska, Shultz and Bloom on-site for ERRS.

Crews will continue to vent compressed gas cylinders. START will screen reactive materials for intact rad contamination.

Reactives will be opened in a glove box purged with nitrogen gas. Crews will change outer gloves between samples to prevent cross contamination of chemicals.

Pel screening with undilute 2241 with 4-9 probe.

1002 Speak with Action Appliance employee to explain cleaning and assessment process.

1214 Acetylene tank # 261 finished venting.

1303 START empties nitrogen tank # 162 while using as a purge gas for reactives testing. START will use nitrogen tank # 289 next.

1358 Crews begin venting hydrogen cylinder #290

1628 START and ERRS done for the day.

1715 Speak with MarTech worker re explosive cleaning process.

Deny

6-12-2014

Beth Chem Lab Site

6-16-14

0801 Arrive on-site, weather forecast 92°F high, 73°F low, 730 flow, 10% chance precip, wind 21 mph SSW. Haven Roski on-site with Bloom and Shultz for SMART. Roski, Bloom and Shultz on-site for ERSS. ERSS will continue venting hydrogen cylinders. SMART continue testing chemicals for red and white.

Set up analytical for waste profile of bulked chemicals.

0944 Continue venting hydrogen cylinder #290. Vent compressed air cylinder #161.

1036 Complete compatibility study on flammable liquids.

1229 Venting of cylinder #290 complete.

1244 Start venting hydrogen cylinder #163. Complete compatibility test and begin bulkling additional flammable liquids.

1641 Bloom and Shultz off-site.

1709 Roski off-site.

1713 O'Connor off-site.

1759 Off-site for the day.

Draft

Beth Chem Lab Site

6-17-14

0833 Arrive on-site. Weather 93°F high, 75°F low, 10% chance precip, wind 21 mph SSW. Haven Roski on-site with Bloom and Shultz for ERSS. O'Connor on-site for SMART.

Crews will organize containers to ensure even ~~bulk~~ segregation for bulking.

1059 EPA Hooper on-site for more red assessment activities.

1434 Disposed unusable need LSC for

reactives. O'Connor setting up analytical bench.

1531 EPA Hooper off-site.

1701 ERSS out for day.

1707 SMART out for the day.

1728 OH-SIT for the day.

DAD

6-17-14

Beth Chem Lab Site

6-18-14

0745 Arrive on-site, weather high 90°F

low TEF, 20°W wind SW
15-25 mph. ERSS Prodi, Bloom and Shultz

on site. START O'Connor on-site.

Crews locating chemicals for rad screening, and bulk chemicals after combustability testing.

0902 EPA Hooper on-site to continue collecting data for final assessment.

1159 EPA Hooper off-site for the day.

1531 ERSS returning, compressor for air line reservoir as crew will now use SCBAs for Level B work.

1613 Test America Lab can not run chemical analysis on potential rad contaminated chemicals.

1624 GEL will be able to run chemical analysis on rad contaminated chemicals.

1711 Crew > off-site for the day.

Day

Beth Chem Lab Site

6-19-2014

0935 Arrive at site. ERSS crew today Prodi,

Bloom and Shultz. START O'Connor on-site

Chris Webber of Smiths Detection on-site

to run samples on GEMS for screening of

chemicals.

1101 Special Agents for FBI (Shawn McGowan, Barn Berglund, and Intern's Michael Austin and Laura Flecke visit site to discuss cleanup process.

1546 ERSS off site for the day

1716 Crews off-site for the day.

1935 Pick up compressor from site.

Daf

6-19-2014

6-18-14

Beta Chem Lab Site

6-20-14

0745 Arrived on-site, weather high 91°F,
low 71°F, 20% chance rain, wind S at
5-10 mph. ERRS crew Roski, Shultz and
Bloom on-site, START O'Connor on-site.

OBZ1 site activity today includes bulkering
halogenated hydrocarbon liquids and additional
flammable liquids. Also, organizing chemicals
and containers for sampling for hazard
identification (contamination). Continue testing reactivities
1047 Finish bulkering halogenated hydrocarbon.
and collecting samples for waste profile.

1131 Ran out of nitrogen gas on site. ERRS
getting tank from Paxair house for inerting
glove box while sampling reactivities. Crew
will wear cylinder to prevent contamination.

1705 STAPES and ERRS off-site for day.

1804 off-site for day.

QAD

6-20-14

Beta Chem Lab Site

6-23-2014

0735 Arrive on site. Weather for today high
83°F, low 64°F, 30% chance rain, NNE wind
at 5-10 mph. ERRS Roski, Shultz and
Bloom on site. START O'Connor on site.

Work today includes sampling reactivities

for LSC. Deliver samples to lab.

0757 Discuss disposal options for mixed
waste with Roski. Need to know data
required for disposal acceptance.

1238 Samples delivered for LSC at
University of Kansas in Lawrence. Michael

Lemon accepted samples for analysis.

1631 ERRS off-site for the day

1736 START off-site for the day

1741 EPA off-site for the day

QAD

6-23-2014

Beth Chem Lab Site

6-24-2014

- 0741 Arrive on-site. ERPS Roski, Bloom and Shultz on-site. START O'Connor on-site work for the day. Segregate 1 test and sample organic and inorganic acids; take wipe samples at outside of unit/reactor containers for LSC.
- 1005 finished bulkling organic acids.
- 1301 Finished bulkling inorganic acids.
- 1435 O'Connor off-site w packing and ship waste profile samples.
- 1607 ERPS off-site for the day.
- 1617 Ferguson returns to site after delivering samples to KU lab in Lawrence, KS.
- 1827 Off-site for day

Day

6-24-14

Beth Chem Lab Site

6-25-14

- 0734 Arrive on-site. Weather 85°F high, 67°F low, 30% chance precip, wind South at 5-10 mph. ERPS Roski, Shultz and Bloom on-site. START O'Connor on-site. Crews will continue to bulk waste groups and sample for waste disposal characterization.
- 1132 Crews complete bulkling of basic corrosive liquids and solids.
- 1205 Deliver samples + KU lab for LSC.
- 1504 Characterization Samples collected from bulked waste groups (needed for waste profile).
- 1611 ERPS crews off-site for the day
- 1653 ERPA off-site. START O'Connor remain on site to complete sampling paperwork.

Day

6-25-14

Beth Chem Lab Site

6-26-2014

0741 Arrive on-site. Weather today 88°F high, 69°F low, 130°F chance rain, wind SSE at 10-15 mph. ERRS Roski, Shultz and Bloom on-site. START O'Connor and Kurnick

Ryakwyal on-site. Work today includes sampling chemicals, with Sampling Containers for LSC, locate containers still needed for segregation / bulking.

1137 Sound oxidizers sampled and containers swiped.

1245 Crew begin swiping and sampling liquid oxidizers.

1314 EPA Hooper on-site. Swipe sampling requirement of USC continuing.

1447 Deliver samples to KU for LSC.

1601 START and ERSS off-site for today.

1625 EPA off-site for day.

Beth Chem Lab Site

6-27-14

0745 Arrive on-site. Weather: wind South 15-25 mph, 130°F chance rain, 88°F high, 70°F low. ERSS Roski, Shultz and Bloom

on-site. START Curnick Ryakwyal on-site. Work for the day: Sample toxics and swift container for LSC. Segregate toxics into combustible waste streams.

0903 Crew begin sampling toxics in background with multiple PPE. Hood on-site. No detection of VOC's above

1130 Ferguson delivers samples to KU for LSC.

1222 ERSS crews off-site for day.

1402 START / ERSS off-site for day.

Doff

6-26-14

Doff

6-27-2014

Beth Chem Lab Site

6-30-14

0943 Arrive on-site. Weather 94°F high, 65°F low, 40% chance rain, wind SSW 20-30 mph. ERRS on site Roski, Bloom and Shultz. START on site O'Connor. Work for the day: deliver samples taken for LSC. Sampling reagents, check to be sure all contained are bulked / segregated.

1137 Deliver samples to KU lab for LSC.

1421 Update KOHE Counsel Paul Mark on site characterization and cleanup progress.

1601 ERRS leave out for the day. 1621 START at office prepping samples for shipping. EPA depart site for day.

1745 All personnel off site for day.

Dey

6-30-14

Dey

7-1-14

Beth Chem Lab Site

7-1-2014

0755 Arrive on-site. Weather 86°F high, 51°F low, 20% chance precip. ERRS Roski, Bloom and Shultz on-site. START O'Connor on-site. Work today: sample tracking, and container and sample management.

0907 Sampled air/water reactive, amines, combustible and irritants for fuel contamination.

1030 Speak with EPA Supervisor Diane Williams.

More funding needed as around 1200 containers at lab versus original estimate of about 500.

Also, many more found to be internal and external fuel contaminated adding extra disposal and analysis cost. Prep action memo amendment.

1529 EPA Hooper on-site to prep wipe

samples from equipment for LSC analysis at KU.

1607 EPA Hooper off-site for day.

1745 All personnel off site for day.

Beta Chem Lab Site

7-2-2014

On site permit on-site. Weather 73°F m³h, 56°F low, 61% precip, NW wind 14 mph. ERSS Roski, Bloom

and Shultz on-site. SMART O'Connor on-site.

Activities for the day included sample management,

sampling combustibles and irritants for Rad, Deliver

samples to KU lab for LSC. No site work for ERSS

on 7/3/14 and 7/4/14 due to holiday on 7/4/14.

1102 ERSS off-site for the day.

1202 Deliver samples to KU.

1704 All personnel off site until PDR for day.

Beta Chem Lab Site

7-3-2014

(No work on Beta Chem Lab Site until
Monday 7/7/2014)

QAD

7-2-14

Dog

7-3-2014

Beta Chem Lab Site 7-7-2014

0749 Arrive on site weather high 95°F, low 71°F, Precip chance 40%, wind SE 5-10 mph. ERPs Roski, Bloom and Shultz on-site. Work today: crews go through chemicals to find uncategorized containers, sample non-hazardous chemicals for rad contamination. START going through additional rad sources.

0816 START PM O'Connor on-site.

1254 Called ICDOE's Tom Conoly about the additional rad sources found at the residence of Beta Chem's operator. The containers had significant radiation contamination and were stored in a trash sack in the garage of the residence. The unsecured radioactive source containers presented a human health to small children living in the home. The containers were over packed and transported to the Beta Chem site to be disposed of at a later time.

1259 Spoke with EPA Legal Counsel about additional sources brought from Beta Chem's owner's residence. Nataar says to truck disposal costs of the sources from the residence separately.

1307 O'Connor sample rad sources for KU lab LSC.

Beta Chem Lab Site (Continued from previous)

7-7-2014

1623 O'Connor off site for the day.
1642 Ferguson off-site for the day.

Beth Chem Lab Site

7-8-2014

- 0737 ARRIVE on-site. Weather high 85°F, low 61°F, 107° chance rain, NW wind 10-15 mph.
ERRS Roski, Shultz and Bloom on-site. STAFF O'Connor on site. Crews will continue to sample non-hazardous chemicals for rad on and in their containers.

0932 Tom Conoly at KOHE arrives to gather information on sources removed from Beth Chem owners residence. Conoly indicated the operator of Beth Chem was not licensed to have radioactive sources in his home. Conoly detected 130mR/hr at a distance of 4-5 inches from the cooler the rad sources are now stored in.

- 1052 Discuss rad cleanup and chemical cleaning progress with Conoly.
1320 EPA Hooper arrives onsite to discuss radiation contamination at the site.
1504 Conoly departs site for the day.
1619 ERRS off site for the day.
1655 EPA and STAFF off site for the day.

Off

7-8-14

Beth Chem Lab Site

7-9-14

- 0741 Arrive on-site. weather high 87°F, low 67°F, wind NNE 6 mph, 10% chance rain.
ERRS Shultz and Bloom on site.
0800 STAFF Prakuryal on-site.
0827 ERRS Roski on site.

- 0849 ERRS crews continue sampling harmful solids, locate/organize and prep samples for delivery to KCL for LSC.
1430 Prakuryal off site for the day.
1544 ERRS off site for the day.
1546 EPA off site for the day.

RJF

7-9-14

BetaChem Lab Site

7-10-2014

0806 Arrive onsite. Weather high 84°F low 70°F, 10% chance of rain, wind SSE at 10-20 mph. Low, wind S at 10-20 mph, 70% chance of rain. ERAS Roski, Bloom and Shultz onsite. START O'Connor on site. Work today includes container management and disposal request for quotes. Also sample management and analytical support. The KU lab for LSC is not open 7/16-15/2014. Samples taken during this time will be submitted when the lab reopens.

0457 ERAS crew get additional compressed nitrogen for sampling remaining reactives in gloves but purged with nitrogen gas. 1405 Set up glove box inside lab just had to reduce exposure to volatile fumes/vapors given off by chemicals while sampling. 1619 ERAS off site. 1643 START at EPA off site.

Beta Chem Lab Site

7-11-2014

0739 Arrive onsite. Weather 95°F high, 71°F. Bloom and Shultz on site. ERAS Roski, Bloom and Shultz on site. Work for day went highly stressed (rusty) one lid cylinder of methyl amine into water (the material is toxic, corrosive and flammable) as it is too risky to try and ship off site.

1002 Bloom and Shultz suited up in level B to pick up cylinder with extended gloved arms. The cylinder was placed in about 30 gallons of water and the valve opened and released the contents. Ferguson and O'Connor were suited up as back up if Bloom or Shultz needed assistance. Crews had radio inside the lab and Roski had radio outside the lab to call for further assistance if needed. The gas dissolved in the water with out any vapors releasing being detected by the Hg/ PID monitor.

1421 Disconnect noted found on door to lab with notice that power was shut off due to non-payment. Call KCPL to get power turned back on. Several dozen chemicals on site require storage at 71°F.

Rey
7-10-14

BethChen Lab Site

7-11-2014

(continued from previous)

- 1427 ERSS called KCPL to get power restored. KCPL returning to turn power back on. ERSS will pay electric bill.
1504 START and ERSS bulk additional Halogenated hydrocarbons and organic acids.

- 1602 ERSS Shultz and Bloom off site. Not returning Monday 7/14/14 unless needed.
1625 ERSS Roski off site.
1646 KCPL restores power to site.
1805 All personnel off site for the day.

Beta Chem Lab Site

7-14-2014

- 0759 Arrive onsite. Weather 81°F with 55% low, 40% chance of rain, wind North NW, 10-15 mph. STAFF O'Connor on site. ERSS Roski working from off-site due to back injury/pain. Crews working on sample and container management as well as disposed bids.

- 1022 Pickup new 44-9 lidium "pancake" probe for Umdum 2241 from the EPA warehouse. The old probe was showing signs of wear and had an elevated background.

- 1237 ERSS Roski called and told me that a disposed bid had been received from BioInomics out of Oak Ridge, TN. The bid included disposal for the bulked wastes: flammable liquids, Inorganic acids, Organic Acids and Carshes. Pick up scheduled for 7/16/2014.

- 1246 Left message for EPA Region IV o/P site disposal coordinator Paula Whiting at (404) - 562-9277.

- 1535 ERSS Roski done for the day.
1702 STAFF O'Connor off site for the day
1721 off-site for the day

RJF

7-14-14

Beth Chem Lab Site

7-15-2014

0755 Arrived onsite. Weather high 76°F, low

54°F, 0" precip, wind NNE at 5-10 mph.

START O'Connor on site. Crews working on

Sample management, container management,

and data management. Additionally, EPA's

Roski is picking up DOT approved containers

for shipping waste off-site.

1015 Spoke with EPA Debbie Bishop about

funding for site in light of increased disposed

cost due to bad contamination of chemicals

and containers on site. Bishop stated we

would need more funding authority and I

will begin work on amending the Action

Memo for the site.

1157 Called Paula Whiting, off-site coordinator

for EPA Region III left a message that

the waste broker Robinsons of Oak

Ridge TN will be shipping the waste for

disposed at the Remerits facility in

Gainesville, FL.

1258 Received call from Paula Whiting EPA

Region 4 off-site disposal coordinator.

Whiting is emailing me the approved

letter for Remerits in Gainesville, FL

as they are in compliance at this time.

1603 Roski off site for today.

(Continued next page)

7-15-14 —

Beth Chem Lab Site

7-15-14

(continued from previous)

1638 Spoke with Martech facility owner Samm C. Wilson (next tenant at the Industrial park to the west of Beth Chem). Update Wilson on clean up process and let him know a truck would be on site tomorrow for a waste pickup.

1725 All personnel off site for the day.

DW

7-15-14

Beta Chem lab Site

7-16-14

0743 Arrive On Site. Weather high 78°F,

low 61°F, 10% chance precipitation, wind N 5 mph.

0805 STARR O'Connor and ERSS Shultz,

Bloom and Roski on site. Site activities today: Place bulked materials into DOT approved shipping containers, load and ship waste offsite.

1101 Neighboring facility owner James Wilson, MarTech, grants access for EPA to

sample property for radiation contamination that may have migrated onto their facility due to pipe breaks and not leaks. EPA

Worker and O'Connor will screen areas adjacent to the Beta Chem facility within Ladlum until 449 pm. Waste sample will be collected for LSC at the laboratory.

1137 Biomass truck arrives. Chris

Harris of Biomass begins labeling bulked flammable liquids, bulked halogenated hydrocarbons (tox.2), bulked lq. base, bulk solid base, bulked inorganic acids, and bulked organic acids. Manifest #01101421455 and 01101418735K. Waste is going to Permatex of Florida (FDO 9807 11071)

1440 NW 87th Place, Gainesville, FL 32653.

Beta Chem lab Site

7-16-14

(Continued from previous.)

1206 ERSS Shultz and Bloom off site

for the day.

1419 Biomedics truck departs site with

waste from Beta Chem site.

1447 ERSS Roski off site for Thursday

1627 EPA and STARR off site for the day

Rey

7-16-14

Beta Chem Lab Site

7-17-2014

0751 Arrive on site. Weather 78°F high,
58°F low, 10% chance of rain, wind SE 4 mph.
Wore today: no date site records, seek bids
for valid sources, segregating toxics into
~~disposal~~ disposal / shipping groups.

1038 Container total, to date: Bulked flammable
liquids (138 containers), bulked halogenated
hydrocarbons (28 containers), bulked liquid
organic acids (9 containers), bulked liquid
inorganic acids (15 containers), bulked liquid
solid bases (16 containers), bulked liquid
bases (5 containers), 14 vented gases,
empties (475 - some were empty after
sampling, field screening or found to be
empty during inventory process). The
remaining containers on inventory have not
been processed for disposal yet.

1511 All personnel off site for the day.

Beta Chem Lab Site

7-18-2014

0757 Arrive on site. Weather 82°F high,
59°F low, 10% chance rain, SW wind 5-10 mph.
No START or ERRS on site today as we
are waiting for disposal bids on remaining
waste.

1325 Spoke with EPA Counsel Nuclear
Mortgage Bankers Possible liable responsible
party for the site.
1628 Off site for the day.

RDL

7-18-2014

RDL
7-17-2014

Beth Chen Lab Site

0821 Arrive onsite. Weather 95°F high,

76°F low, precip 10", wind 17 mph south..

START O'connor site. No ERQs on site.

ENR Roshi: working with disposal companies

on bags for work scenario on site - START

working on Radiation Contamination Summary

report and LSC Sampling and analysis management.

1325 START Depart site due to illness.

1441 All personnel off site for day.

7-21-2014

Beth Chen Lab Site
OSC Ferguson on sick leave. START O'connor

On site working on radiation data

Summary report.

QMJ

7-22-2014

QMJ

7-21-2014

Pete Chen lab site

7-23-2014

1004 Arrived on site. Weather high 89°F,
low 66°F, 0% precip, wind NE 11 mph.
START O'Connor on site working on
site report and sample management and
data were generated.

1134 Delivered samples to KU lab for LSC.

1628 Personnel off-site for the day.

Pete Chen lab Site 7-24-2014
0801 Arrived on site. Weather high 88°F,
low 63°F, 0% chance rain, wind SE at 5-10 mph.
START O'Connor on site. ERSS Paskin out
until Monday 7/28/2014. ERSS waiting for
LSC data from lab to determine disposal
options and submit requests for disposal bids.
START working on radiation data
Summary report.

1416 Received draft LSC report from

KU lab. All personnel off site for day
1628 New funding for ERSS from AM
announced received.

Day

7-23-2014

Day

7-24-14

Beth New Lab Site 7-25-2014

0743 Arrive on site. Weather high 97°F,
78°F low, 10% chance rain, wind 18mph South SW.
0830 Start O'Connor arriving on site. Working
on radiation assessment report. ERCS
Rock off site but working on disposed
bids.

1617 Start off site for the day
1621 off site for the day.

Beth New Lab Site.

7-28-2014

0741 Begin work for the day. Weather
high 82°F, low 63°F, 0% precip, wind 11mph N.
Start O'Connor on site. Start working
on rad assessment report. ERCS Rocki
off site until 7/28/2014 but working on
bids for disposal.

1735 work complete for the day.

REB

7-25-2014

QMJ

7-28-2014

Beth Chem Lab Site

7-29-2014

0756 Begin site work for modeling: weather 83°F high, 65°F low, 0% precip, wind bough NNE. START O'Connor on site today working on radiation data summary report, summary data from LSC. ERIS Russia not on site but will get LSC data to develop comparison for birds. 1031 off-site for the day.

Beth Chem Lab Site

7-30-2014

0811 Begin work for the day: START O'Connor off site working on radiation assessment report and summary data from LSC. ERIS Russia not on site but still working on bird proposals for waste disposal. Weather forecast today high 83°F, low 65°F, 20% chance precip, wind bough out of site. DAS 7-30-14 NE.

1232 Call from KU LSC lab. Create container 718. Tell KU it is actually 2,6-dimethyl aniline not 2,6-dimethyl amine.

1732 off site for the day

QAS

7-29-2014

QAS

7-30-14

Beth Chen Lab Site

7-31-2014

0830 Arrive on site. Weather forecast
high 86°F, low 64°F, 0% chance rain,
6 ft sun, wind S mph E. SMART
off-site today. Crews are writing
for remainder of LSC data for
disposal birds will decon equipment
no longer needed for transport off-site.
1031 ENRS Roski on site to coordinate
disposal of containers remaining on site.
1435 ENRS Roski departs site for the day.
1625 off site for the day.

QMJ
7-31-2014

Beth Chen Lab Site

8-1-2014

0830 Arrive at EPA Regional office. No
crews working on-site today.
0950 Spokane with SMART O'Connor, amphere,
O'Connor is working at the SMART office
today, reviewing lab data from LSC at KU.
1049 Spokane with ENRS Roski about progress
on getting data out to disposal companies.
1127 Sent new data from KU out to
Roski and O'Connor.

QMJ
8-1-2014

Beth Chen Lab Site 8-4-2014

No work on site today. worked on
QAPP amendments and bids for
proposals.

1138 Spoke with ERSS Roski for update
on bid proposals.
Start not on site this week.

QDF,
8-4-2014

Beth Chen Lab Site 8-5-2014

No work on site today. waiting for
bid proposals.

QDF
8-5-14

Beta Chem Lab Site

8-6-2014

Beta Chem Lab Site

8-7-2014

No work on site today except
for decontaminating equipment and
returning the equipment to the
EPA waste house. Work was performed
by EPA no START/ENRIS on-site.

QES

8-7-2014

QES
8-6-2014

Beth Ann left site 8-8-2014
no work on site today.

Beth Chev lab site 8-11-2014
0812 Arrive on site. Weather high 80°F,
590F, 109° precip., wind 16 NNE. STAFF
O'Connor working from STARR office today.

No ERES on site today. Work today:

STARR working on radiation assessment
Report. ERES making disposal arrangements.

LOB visit with Baum, Berglund and Shara
MC cover about site conditions and

Chemicals stored on site.

1101 Confirm with ERES. Ruski has
return to the site on Tuesday 8/12/14.
Ruski is awaiting bids for disposal of
waste.

1541 Off site for the day.

Off
8-8-2014

Off
8-11-14

Beta Chem Lab Site

8-12-2014

072 Arrive on site. Weather today high 80°F, low 59°F, 0% precip, wind 10mph NW. START O'Connor working from START offsite today. ERSS crew will begin overpacking chemicals.

0821 Called O'Connor. His 8-12-14 O'Connor is working on final assessment report and getting analytical data from KU organized.

0830 O'Connor is amending the QAPP to include the field screening tests used on unknowns to determine the hazard class for segregation. Also, liquid scintillation counting (LSC) was added to test chemical containers and contents for radiation contamination. The Hand held instruments detect only 2-3 counts for every 100 actually emitted but, the LSC sees about 80-90 for every 100 detections.

0845 ERSS Roski, Tessie Fondon and Edward Truitt on site for overpacking chemicals.

0915 ERSS begins weighing, and screening and double bagging and segregating toxins.

1615 All personnel off site for the day.

Beta Chem Lab Site

8/13/2014

0815 Arrive on site. Weather high 83°F, low 62°F, wind N at 3 mph, 0% rain chance. ERSS Truitt and Fondon will continue weighing, rad screening and double bagging chemicals. ERSS Roski is picking up supplies for the site. Still waiting for last of the LSC data for disposal.

1602 All personnel off site for the day.

JES

8-13-14

Beth Chen Lab Site 8-14-2014

0716 Arrive on site. Weather high 86°F,

low 67°F, 0% precip, wind 7 mph SE.

0745 ERAS Roski on site.

0859 START O'Connor on site. Work today includes cleaning up data on inventory

and filling any data gaps in.

1315 ERAS Roski sent out data for

disposal birds. Remainder of data will be

sent out when available.

1605 All personnel at site for today.

OCT

8-14-2014

OCT

8-15-14

Beth Chen Lab Site 8-15-2014

0805 Arrive on site. Weather 91°F with,

73°F low, 50% chance rain, wind 13 mph SSE.

ERAS Roski and START O'Connor on site.

ERAS working on final bird packages for

containers we have data for. START

reviewing new data and assisting ERAS

with container screening.

0931 ERAS Fondon on site to continue

weighing and screening containers with

pancake probe of medium 2241.

1205 ERAS Manual Schmedick taking over

site for the remainder of the day.

OSC Ferguson off site.

Beta Chem Lab Site

8-18-2014

0751 Arrive on site. Weather 90°F high,
low 72°F, wind SSE 6 mph, 20% chance rain.
ERRS Roski onsite. ERRS Fondren onsite

double bagging toxic and reactives after
weighing and screening with Ludlum 7211
equipped with 445 probe. START O'Connor
working from the START office today on
organizing data that came in from LSC
lab on Friday afternoon. ERRS
also screening all of the 1 liter "lecture"
bottles for rad contamination.

1632 Crews off site for the day.

Beta Chem Lab Site

8-19-2014

0758 Arrive on site. Weather 93°F high,
~60°F low, wind 6 mph SW, 10% chance rain.

0820 ERRS 8-19-14 START O'Connor onsite

Work for the day includes correlating data
from LSC lab to the inventory sheets
and identifying any gaps in the data.
START also supplying the small gas
cylinders (1L lecture bottles) for
rad contamination on their containers.

1605 ERRS off site for the day.
1632 START off site for the day.
1642 EPA off site for the day.

QAD
8-18-14

QAD
8-19-14

Beta Chem Lab Site

8-20-2014

0910 Arrive on site. Weather 95°F high, 80°F low. 79°F, 10% precip, wind 13 mph SSW.
0915 Call from ERIS Posto, Biometrics update on bird change and data from APNE to RIO courses. Birds due at 1300 today but may need extension due to the large amount of data and number of different naturally to find disposal for.

1533 Personnel depart site for the day.

QAH
8-20-14

Beta Chem Lab Site

8-21-2014

0804 Arrive on site. Weather 97°F high, 81°F low, 0% chance of rain, wind 14 mph SSW. START O'Connor on site updating data, preparing wipe samples for delivery to Test America LSC lab in St Louis, Mo. START also locating remaining containers for sampling at KU LSC lab so they can go with the samples collected yesterday. 1124 Call KU LSC lab - Lab prefers sample delivery tomorrow as program busy with new students.
1644 Depart site for the day

QAH
8-21-14

Beta Chem Lab Site

8-22-2014

0802 Arrive onsite. Start O'Connor on site. Weather 98°F high, 72°F low, 78°F, wind SSW, precip 0% chance. 1040 Ferguson deliver samples to lab for LSC analysis. Pick up sample containers with unused portion of sample for disposal. 1208 EPA off site for the day.

1008

8-22-14

Beta Chem Lab Site

8-25-2014

0815 Arrive onsite. Weather high 98°F, low 78°F, wind SSW, precip 0% chance. Start O'Connor on site. Start will be putting sample containers back into my lab bottles. 0934 Called ERPS Roski about segregation of containers for shipping and disposal. 0946 Crews sorting containers and pairing sample containers with original containers. 1004 ERPS Roski on site. Roski will go over data with O'Connor to make sure all containers are ready for disposal. 1605 All personnel off site for the day.

1008

8-25-14

Beta Chem Lab Site

8-26-2014

0801 Arrive on site. Weather 95°F high, 75°F low, wind 7 mph E, precipitation 0%.
0919 Called START O'Connor. O'Connor is still working on filling in data gaps for disposal characterization. ERRS Russia is segregating waste into proper disposal groups and applying data received from KU LSC lab.

1532 Return off site for the day.
1634 START / EPA depart site for today.

QMJ
8-26-14

Beta Chem Lab Site

8-27-2014

0111 Arrive on site. Weather today 92°F high, 75°F low, precip 40% chance, wind 7 mph SSE. O339 call ERSS Russia, accept bid from Pronovas (no other bids offered), determine data still needed for disposal. Waiting for KU-LSC data from samples delivered on Friday of last week.

0946 Call START O'Connor. KU and PACE lab data should be ready by this Friday (8/29/2014).
1332 Off site for the day.

QMJ
8-27-14

Beta Chem Lab Site

8/28/2014

Beta Chem Lab Site

8/29/2014

0715 Arrived on site. Weather high 92°F,
73°F low, 50% chance rain, wind S
at 10 mph. START O'Connor working
from START offsite today. ERSS
Russia onsite. START / ERSS are
filling data gaps for disposal criteria.
ERSS separating chemicals into disposal
groups.

1520 ERSS Russia off site for the day.
1603 ERSS off site for the day.

1642 Call ERSS Russia. (He did not receive
any other bids. Russia will get hold of
RNCM as soon as possible to accept
the bid and schedule a pickup of the
waste.

1646 Call START O'Connor. Update
O'Connor on acceptance plan. O'Connor
says remainder of data is in from LSC
LSC. O'Connor working to fill the data
into container inventory for future
disposal bids.

OK
8/27/14

OK
8/28/2014

No personnel on site today.
0832 Call ERSS Russia. Need to accept bid
so we can get work off site.

0835 Call START O'Connor. O'Connor is
checking on data missing for LSC from
lca lab.

1642 Call ERSS Russia. (He did not receive
any other bids. Russia will get hold of
RNCM as soon as possible to accept
the bid and schedule a pickup of the
waste.

Beta Chem Lab Site

9/2/2014

(no work on 9/1/14 due to Labor Day Holiday)
0807 Arrive on site. Weather high 88°F,
low 70°F, precip 10%, wind 4 mph N.

0815 SMART O'Connor on site.
0839 Called ERRS Roski to discuss activity

on site today. SMART/ERRS review
Inventory list and disposal lists to
ensure non-hazardous chemicals are
correctly identified by hazard. Begin
Separating chemicals out into shipping
Container groups to speed up the
over packing process when shipping
containers arrive.

1015 ERSS Roski called. Shipping containers
arrived on 9/3/14. Should complete
packing by the end of the week.
1033 Called SMART O'Connor. Single
Containers in numerical order to
simplify pairing with containers for
disposal.

1632 All personnel off site for the day

QES

9-2-14

QAY

9-3-14

Beta Chem Lab Site

9/3/14

0832 Arrive on site. Weather high 90°F,
low 76°F, 50% chance rain, wind S at 10 mph

1002 Shipping containers arrive.

1031 ERSS Roski on site. Continue
reviewing chemical inventory lists and
segregating into shipping groups.

1607 All personnel off site for the day

Beth Chem lab Site 9/4/2014

- 1120 Arrive on site Weather today high 95°F, low 73°F, 0% precip, wind 12 mph SSW. START O'connor and ERPS Rocki on site. START/ERPS are organizing containers and data for overpacking and off site disposal.
- 1515 Remainder of overpacks arrived on site.
- 1522 off site for the day. START/ERPS still working on site.

Off
9-4-14

Beth Chem lab Site 9-5-2014

- 0145 call START/ERPS. work on data for disposal and update chemical list.
- 1005 Arrive on site. Weather high 80°F, low 60°F. 60% chance of rain, wind 14 mph about 9-5-14 NNE. START Screening bad sources from residence. ERPS beginning to overpack waste for picking scheduled for next week.
- 1318 START off site.
- 1328 EPA off site for week.

Off
9-5-2014

Beta Chem Lab Site

9-8-2014

0745 Arrive on site. Weather high 86°F,
low 74°F, 0% precip, wind 13 mph S.

START O'Connor on site

0831 ERAS Roski on site.

0859 ERAS Fondren on site. (raw)

today will over pack chemicals to
meet DOT standards.

1015 Pick up last group of sample

containers from KU LSC lab.

1545 EPA off site for training.

Beta Chem Lab Site

9-9-14

0635 Arriving on site. Weather high 92°F,
low 76°F, 20% chance, wind 15 mph SSW.

0732 START O'Connor on site

0804 ERAS on site to over pack chemicals

by shipping groups. START continue to
match sample container with original
container.

1641 About 150 containers over packed into

7 containers (mainly toxic and rad).

1632 Off site for the day.

QDT

9-8-14

QDT

9-9-14

Beta Chem Lab Site 9-10-2014

Beta Chem Lab Site 9-11-2014

- 1107 Arrive on site. Weather high 74°F, 0704 Arrive on site. Weather today low 53°F, 110% chance rain, wind 13mph NNE. WNW.
1205 TERS Puski called with Biomasses pick up date scheduled for the week of 8-12 September 22 as the week of September 15 is booked for another site.
- 1304 Begin demobilizing equipment not needed on site. All equipment used in the contaminated area is decommissioned and Greened for send with Lindblom 2241 before leaving the site.
1438 off site for the day.

1205 TERS Puski called with Biomasses pick up date scheduled for the week of 8-12 September 22 as the week of September 15 is booked for another site.

1107 Bring equipment back to EPA warehouse after decom and screen with Pancake Probe.
1545 Depart for the day.

DRJ
9-10-14

DRJ
9-11-14

Beth Chem Lab Site 9-12-2014

0910 Arrive on site. Weather today: high 50°F low 43°F, 30% precip, wind NNE at 11 mph. ERCS Rock, on site preparing the generator for demolition.

Also preparing mobile mini offru

for demolition.

ISUP No activity next week for ERCS, waiting for waste pickup. Returns to site the week of 9/22/2014 for waste pickup.

QES

9-12-14

QES

9-15-14

Beth Chem Lab Site 9-15-2014

0715 Call SMART O'Connor. will drop off keys to the site so he can continue to organize and document containers ready for shipping off site for disposal.

1645 START / ERCS company lists of chemicals scheduled for disposal and non-hazardous to remain on site.

Beth Chem Lab Site

9-16-2014

START on site today - START
O'Connor found what he believed were
135 additional containers needing
over packed. ERSS Ruski will
return to SJH on 9/22/2014 to
go through remaining chemical
to ensure no hazardous
substances remain on site.

QDF

9-16-14

QDF

9-17-14

Beth Chem Lab Site 9-17-14
1523 START Prakury will be on
site 9/24/2014 for the scheduled
pick up of waste containers from the
site.

Beth Chen Lab Site 9-18-2014
START O'connor on site
review chemical disposal list.

Beth Chen Lab Site 9-19-14
No one on site today waiting for
chemical disposal next week.

Beth Chem Lab Site

9-22-2014

Called ERSS Roski. Roski will be
on site 9/23/2014 to finish over packing.

Beth Chem Lab Site 9-23-2014
ERSS > Roski on site getting remaining
chemicals into over packs for
shipping.

9-22-14
Ros

9-23-14
Ros

Betz Chem Lab Site 9-24-2014

ERSS Paski on site to finish over packing with on ERSS labor Kelly. 1122 START Pyakuryal on site to document waste transported from site. 1207 Arrive on site. Crews overpacking and labeling containers for shipping off site. There are several containers of chemicals that will not be able to go on same shipment due to DOT restrictions. Bionomics will be assisting 1650 off site.

Betz Chem Lab Site 9-25-2014

Weather high 83°F, low 65°F, 0% precip,

wind 8 mph South.

1230 On-site. ERSS Paski, Bionomics labors preparing manifests and shipping paper as well as over pads for shipping away to off site.

1612 START Pyakuryal off site for day. 1702 ERSS Kelly off site for the day. 1758 All remaining personnel off site for the day.

Deng

9-24-2014

9-25-14

Deng

Beta Chem Lab Site

9-26-2014

1007 Arrive on site. Crews are finishing up manifests and loading white for trans port.
1343 Brunomics truck arrived and departs site with 13⁵⁰⁰ 5 gallon buckets, four 10 gal buckets, and one 35 gallon poly drum of toxics, radioactive, corrosive, reactive and flammable hazardous wastes samples.
1402 Off site for the day

QMS

9-26-14

Beta Chem Lab Site

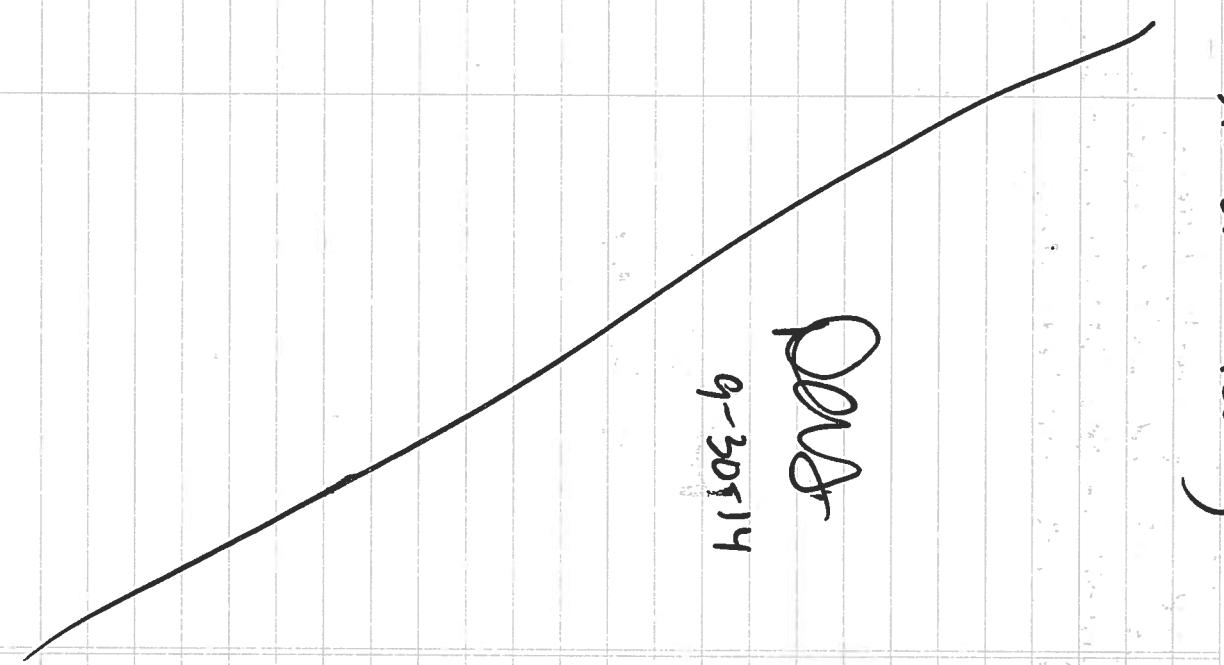
9-29-2014

1309 Meet STAFF O'Connor on site to clean up equipment, decon, and screen for lead before returning the equipment to the EPA warehouse.
1435 Off site for the day

QMS

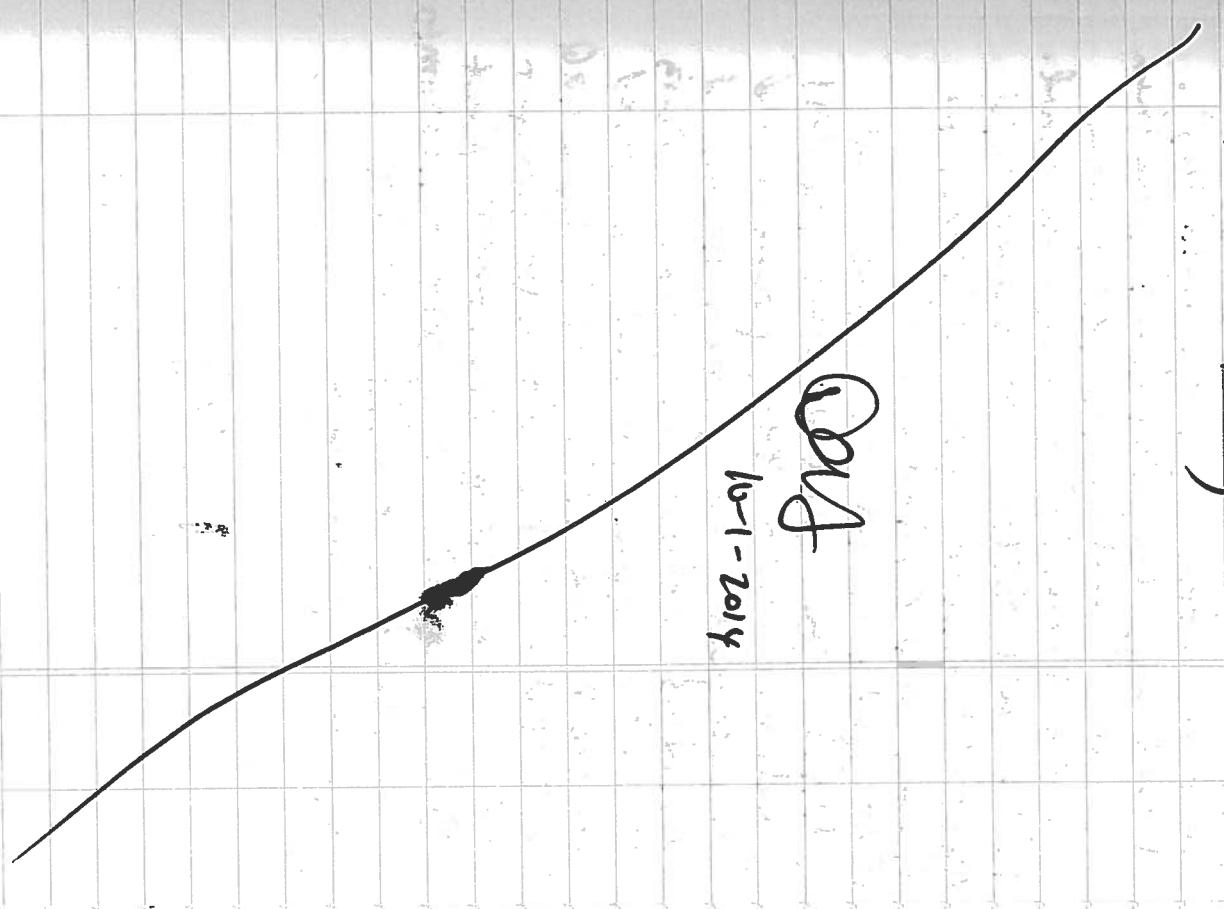
9-29-2014

Beta Green Lab Site 9-30-2014
no site work today



Det

9-30-14



Det

10-1-2014

Beta Green Lab Site 10-1-2014
no site work today

Beta Chem lab Site 10-2-2014

1237 called ERSS Roski about

Lecture bottle (1L gas cylinder).

Roski says Pennfix won't take them.

Another facility in Texas can take them if they are decommissioned.

1517 Call STARR or Connor. Will

meet O'Connor 1100 10/6/2014 to

decon gas cylinders.

1522 Spoke with Tom Conoly of

KODIE. Tom stated that the 241

barium with 44-9 probe would

be adequate to screen deconned

cylinders below the release criteria

of 5000 dpm/100cm³ specified

in the Wures 1557, Vol. 7 Appendix Q

1617 talk with Butch Drekanper

of Lenexa Fire Department. Meet

Butch at SIV 10/6/2014 at 11:00am to

go through the site for fire

response planning.

Beta Chem lab Site 10-3-2014
No site work today

QDF

10-3-14

QDF
10-2-14

Betr Chem Lab Site

10-6-2014

1107 Meet START O'Connor on site
and decon "lecture bottle" 1L

gas cylinders.

1507 Paint stripper reduced rate
on most cylinders below 5000 rpm)
10 cm². 7-8 still need additional
decon. Will bring abrasive pads
to decon 10-7-2014.

1643 Report site for the day.

1037 ENCS Kelly over onto tank
Bromine container into DOT
package plus other chemicals from
the refrigerator.

1409 Continue decon of small
cylinders.

1731 off site for the day

Betr Chem Lab Site 10-7-2014

0825 Prepping Sarah wrap for
covering the 44-9 pancake probe so
it doesn't get contaminated.

0845 Arriving on site. START
O'Connor on site with Clint
from Bromine to help get remaining
chemicals over packed to meet
DOT requirements.

1037 ENCS Kelly over onto tank
Bromine container into DOT
package plus other chemicals from
the refrigerator.

1409 Continue decon of small
cylinders.

1731 off site for the day

John 10-7-14

10-6-14

John

Beta Chem lab site 10-8-2014

Ogus arrived at Beta Chem.
Start O'Connor and EPA Ferguson
on site to continue decommissioning
gas cylinders.

1233 Finish decom cylinder.

Need to get plugs for valve opening
for decommissioning 10-8-2014

ROB on inhalation hazard group.

1242 off site for day

Beta Chem lab site 10-9-2014

MCS Arrive on site. Met with
EPA O'Connor to locate plugs
for poison gases to meet shipping
requirements. None of the hardware
Spare bolts would fit. Searched
for plugs on-site and showed
Keweenaw.

1209 Depart site.

DRF

10-8-14

DRF

10-9-2014

Bekl. Men ver fitt 10-10-2014

No sitz nake today.
No worn wonder day
as (7 B) columbus Day
holiday. Wasted school to be
done today brought on 10/4/2014.